

## Claims:

- Sub 4
1. Viral interleukin-6 (v-IL-6), which can be obtained by recombinant expression of the DNA of ~~HHV-8~~ human herpes virus type 8 ("HHV-8")
  2. A polypeptide, which can be obtained by recombinant expression of the DNA of HHV-8, and which comprises the amino acid sequence ~~displayed in fig. 2.~~ (SEQ ID NO: 1) of
  3. A polypeptide having the amino acid sequence ~~displayed in fig. 2.~~ (SEQ ID NO: 2) of
  4. A fragment of v-IL-6, having the capability of binding to an interleukin-6 ("IL-6") receptor and comprising the amino acid sequence ~~GFNEtsCLKKLadGFFEFE.~~ (residues 81-105 of SEQ ID NO: 2)
  5. A fragment as claimed in claim 4, which ~~essentially comprises~~ consists of the amino acid sequence ~~GFNEtsCLKKLadGFFEFE.~~ (residues 81-105 of SEQ ID NO: 2)
  6. A fragment as claimed in claim 4 or 5, which binds to a human IL-6 receptor.
  7. Mutants and variants of v-IL-6 as claimed in claim 1, ~~or of the polypeptide as claimed in claim 2;~~ which mutants and variants are obtained by conventional amino acid substitutions or deletions, with the proviso that these mutants and variants are functionally equivalent to v-IL-6.
  8. ~~Fragments of the v-IL-6 as claimed in claim 1, or the polypeptide as claimed in claim 2 or 3, characterized in that they are able to competitively inhibit the biological activity of IL-6 in a suitable assay system.~~ A fragment of IL-6
  9. An isolated nucleic acid coding for v-IL-6 as claimed in claim 1.
  10. An isolated nucleic acid coding for the polypeptide as claimed in claim 2.
- Sub 5
- Sub 6

11. An isolated nucleic acid having the nucleotide sequence <sup>(see also: 2) of</sup> displayed in fig. 2.
12. An isolated nucleic acid <sup>molecule</sup> hybridizing under stringent conditions to the nucleic acid as claimed in ~~one or more of the claims 9 to 11~~ <sup>claim 11</sup>, encoding functional v-IL-6.
13. Monoclonal or polyclonal antibodies <sup>which bind</sup> directed against v-IL-6 as claimed in claim 1, ~~or the polypeptide as claimed in claim 2 and/or 3.~~
14. Testkit for the detection of v-IL-6 in a sample, comprising <sup>a container and</sup> an antibody as claimed in claim ~~10~~ <sup>13</sup>.
15. Testkit for the detection of antibodies against v-IL-6, comprising v-IL-6 as claimed in claim 1 and/or the polypeptide as claimed in claim 2 or 3 or both, claims 2 and 3, and/or mutants and variants of v-IL-6 as claimed in claim 7, and/or fragments of v-IL-6 as claimed in claim 4-6 or 8.
16. Testkit for the detection of v-IL-6 DNA or RNA, comprising a nucleic acid <sup>acid molecule</sup> as claimed in ~~one or more of the claims 9 to 12.~~ <sup>claim 11</sup>
17. A medicament comprising as an active ingredient the antibody as claimed in claim 13.
18. A medicament comprising as an active ingredient v-IL-6 as claimed in claim 1 and/or the polypeptide as claimed in claim 2 or 3, and/or mutants and variants of v-IL-6 as claimed in claim 7, and/or fragments of v-IL-6 as claimed in claim 4-6 or 8.
19. A medicament comprising as an active ingredient the nucleic acid as claimed in in one or more of claims 9 to 12.
20. A cell culture growth medium, comprising ~~as an additional active ingredient v-IL-6 as claimed in claim 1, or the polypeptide as claimed in claim 2 or 3, or mutants and variants as claimed in claim 7, or fragments as claimed in claim 8, or mixtures of these substances.~~

21. A process of manufacturing v-IL-6 as claimed in claim 1, or the polypeptide as claimed in claim 2 or 3, or mutants and variants as claimed in claim 7, or fragments as claimed in claim 4-6 or 8.
22. A process of manufacturing a medicament, wherein v-IL-6 as claimed in claim 1, or the polypeptide as claimed in claim 2 or 3, or mutants and variants as claimed in claim 7, or fragments as claimed in claim 8 are combined with suitable excipients and/or other auxiliary compounds.
23. A process of manufacturing a medicament comprising as an active ingredient monoclonal or polyclonal antibodies directed against v-IL-6, or a polypeptide comprising v-IL-6, or mutants, variants or fragments of v-IL-6, or a nucleic acid encoding v-IL-6 for the treatment of kaposi sarcoma, Castleman's disease, multiple myeloma, kidney cell carcinoma, mesangial proliferative glomerulonephritis or B cell lymphoma.
24. A process of diagnosing an HHV-8 infection comprising the in vitro detection of v-IL-6 antigen, v-IL-6 DNA, v-IL-6 RNA or antibodies against v-IL-6.
25. A process of diagnosing the HHV-8 associated disorders kaposi sarcoma, Castleman's disease or body cavity based lymphomas (BCBL) through the diagnosis of an HHV-8 infection as claimed in claim 24.
26. A process of growing cells in culture, characterized in that v-IL-6 as claimed in claim 1, or the polypeptide as claimed in claim 2 or 3, or mutants and variants as claimed in claim 7, or fragments as claimed in claim 4-6 or 8, or mixtures of these compounds are contained in the growth medium.
27. The process as claimed in claim 26, wherein the cells are B-lymphocytes, hybridomas, hemopoetic cells or endothelial cells.

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